



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

[Handwritten signature]

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,098	07/10/2001	Tomofumi Kitazawa	210829US2	7442
22850	7590	02/25/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			TRAN, NHAN T	
			ART UNIT	PAPER NUMBER
			2615	

DATE MAILED: 02/25/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/901,098

Applicant(s)

KITAZAWA ET AL.

Examiner

Nhan T. Tran

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15/12/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 2-5,9 and 11-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species I (Figures 4-5) in Paper No. 14 is acknowledged. The traversal is on the ground(s) that it has not been established that it be an undue burden to examine each of the noted inventions and claims together. This is not found persuasive because the Species I, II, III and IV are distinct from each other. These distinct Species require different search areas to be established and this places a serious burden on the Examiner. For instant, the Species I is classified in 348/208.11 and/or 396/52, the Species II is classified in 348/208.5 and/or 396/55, etc.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6, 7 & 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Washishu (US 5,973,319).

Art Unit: 2615

Regarding claim 1, Washishu discloses an imaging apparatus (Fig. 19) comprising:
an imaging optical system (lens device) as shown in Fig. 19;
an inherent imaging unit (either film or CCD) in the camera shown in Fig. 19 for capturing an object image;

a shake detection unit (2064) detects a shake of imaging apparatus (Fig. 25); and a shake correction unit (1077) which corrects image blurring on the image pickup unit based on the shake detection information detected by the shake detection unit (see col. 28, lines 7-41);

a prediction arithmetic unit (microcomputer 2063) which calculates predictive shake information (at calculation circuit 2063A) based on the shake detection information, and determines a position as a start position of a correcting operation of the shake correcting unit and at which predictive shake is canceled out based on the predictive shake information (see col. 28, lines 7-41 wherein a start position is implicitly determined at compensation circuit 2063C in each feedback cycle during compensation until the start position reaches the target position, where the difference between the two positions is zero);

a control unit (also, microcomputer 2063) which controls driving of the shake correction unit at the correcting-operation start position and corrects the image blurring (col. 28, lines 7-41).

Regarding claim 6, Washisu also discloses that the control unit imparts the correcting-operation start position as area information having a range (see col. 24, lines 21-33 and note a narrow range).

Art Unit: 2615

Regarding claim 7, inherent in the microcomputer (2063) is a correlation storage unit (i.e., buffer or working RAM in the compensation circuit 2063C) which previously stores a correlation between the predictive shake information and correcting start-operation positions (output from differential amplifier 2063B) in order for the compensation circuit to update the difference between a currently start position and the target position to properly drive the correction lens according the feedback loop. The compensation circuit 2063C is also a correcting-operation start position unit which determines the correcting-operation start position through retrieval (due to feedback) of the correlation stored in the inherent storage unit based on the predictive shake information from calculation circuit 2063A (Fig. 25; col. 28, lines 7-41).

Regarding claim 10, see the analysis in claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Washisu (US 5,973,319) in view of Sakagami et al (US 5,727,234).

Art Unit: 2615

Regarding claim 8, Washisu teaches that the shake correction unit is driven within a narrow stroke range so that the driving of the shake correction unit can be controlled as described in col. 24, lines 21-39. Washisu does not explicitly teach a correction range storage unit and a detection unit which detects a shake quantity of the shake detection information is beyond the range previously stored in the correction range storage unit, and a warning unit which issues a warning when the detection unit detects the shake quantity that is beyond the range in the middle of controlling the driving of the shake correction unit.

Sakagami teaches a camera with shake correction, detection and a warning display. The camera includes a shake amount detection system that detects the amount of shaking of the camera, a drive system that drives the correction lens to effect shake correction and a movement detection system detects the amount of movement of the correction lens. The camera also includes a microcomputer (MPU) which has a memory to store instruction codes including a preset value for shake correction range. The microcomputer determines whether the movement of correction lens (correction error) exceeds a preset value, and if correction error exceeds the preset value, a warning signal is sent to the display to inform the user (see Abstract; col. 6, lines 30-58 and col. 9, lines 33-45).

Therefore, it would have been obvious to one of ordinary skill in the art to combine Washishu with Sakagami to enhance the effect of shake correction by enabling a detection of movement of shake correction unit with reference to a preset value stored in a memory of the microcomputer so that a warning would be displayed if the movement of correction unit had exceeded a preset value thereby informing the user to perform an appropriate action during photographing.

Art Unit: 2615

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (703) 605-4246. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.



ANDREW CHRISTENSEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600